

What is claimed is:

1. An objective lens for an optical pick-up that converges a parallel light beam incident thereon onto a recording layer of an optical medium, said objective lens comprising:

a single glass plano-convex lens having a convex surface at the incident side of the parallel light beam and a flat surface at the side of said optical medium, thereby keeping numerical aperture not less than 0.7.

2. The objective lens according to claim 1, wherein the refractive index of said glass is not smaller than 1.6.

3. The objective lens according to claim 1, wherein said plano-convex lens is made through glass molding process with a pair of dies that correspond said convex and flat surfaces, respectively.

4. The objective lens according to claim 1, wherein said plano-convex lens is provided with an outer flange formed around the edge thereof to be held by a fine actuator that drives said plano-convex lens in the optical axis direction.

5. An optical pickup, comprising:

a light source that emits a light beam;

an objective lens that converges said light beam emitted from said light source onto a recording layer of an optical medium, said objective lens comprising a single glass plano-convex lens having a convex surface at the incident side of the parallel light beam and a flat surface at the side of said optical medium, thereby keeping numerical aperture not less than 0.7; and a magnetic coil for applying a magnetic field to said optical medium, said magnetic coil is arranged on said flat surface of said objective lens.